

(12) PETTY PATENT APPLICATION
(19) AUSTRALIAN PATENT OFFICE

(11) Application No. AU 199741021 A1
(10) Patent No. 686555

(54) Title
Compact disk storage box

(51) International Patent Classification(s)
B65D 085/30 G11B 023/03
B65D 085/57

(21) Application No: 199741021

(22) Date of Filing: 1997.10.15

(43) Publication Journal Date: 1998.02.05

(44) Accepted Journal Date: 1998.02.05

(71) Applicant(s)
Ting Lih Industrial Co., Ltd.

(54) Inventor(s)
Jiin-Ting Chen

BEST AVAILABLE COPY

SPRUSON & FERGUSON

AUSTRALIA

PATENTS ACT 1990

PATENT REQUEST: PETTY PATENT

I/We, the Applicant(s)/Nominated Person(s) specified below, request the grant of a patent to the person identified below as the Nominated Person, for an invention described in the accompanying Petty complete specification:

[70,71] Applicant(s)/Nominated Person(s):

Ting Lih Industrial Co., Ltd., of No. 25, Lane 80, Da Shin Rd., Tan
Tze, Taichung, TAIWAN

[54] Invention Title:

Compact Disk Storage Box

[72] Inventor(s):

Jiin-Ting Chen

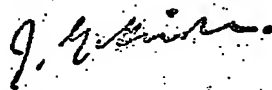
[74] Address for service in Australia:

Spruson & Ferguson, Patent Attorneys
Level 33 St Martins Tower
31 Market Street
Sydney New South Wales Australia (Code SF)

DATED this FIFTEENTH day of OCTOBER 1997

Ting Lih Industrial Co., Ltd.

By:



Registered Patent Attorney

IRN: 394833

INSTR CODE: 59373

S 080228 15 OCT 1997

SPRUSON & FERGUSON

Australia
Patents Act 1990
Notice Of Entitlement

686555

I, John Gordon Hinde, of 31 Market Street, Sydney, New South Wales, 2000, Australia, being the Patent Attorney for the Applicant/Nominated Person in respect of Application No. 41021/97, state the following:-

The Applicant/Nominated Person has entitlement from the actual inventor as follows:

The Applicant/Nominated Person is the assignee of the actual inventor.

DATED this Eighteenth Day of November 1997


John Gordon Hinde

IRN: 394833

Instructor Code: 059373

[N:WJBU]29944:lam



AU9741021

(12) PATENT ABRIDGMENT (11) Document No. AU-B-41021/97
(19) AUSTRALIAN PATENT OFFICE (10) Acceptance No. 686555

(Australian Petty Patent)

- (54) Title:
COMPACT DISK STORAGE BOX
- (51)^a International Patent Classification(s)
B65D 085/30 B65D 085/57 G11B 023/03
- (21) Application No. : 41021/97 (22) Application Date : 18.10.97
- (43) Publication Date : 05.02.98
- (45) Publication Date of Granted Application : 05.02.98
- (71) Applicant(s)
TING LIH INDUSTRIAL CO., LTD.
- (72) Inventor(s)
JIIN-TING CHEN
- (74) Attorney or Agent
SPRUSON & FERGUSON, GPO Box 3898, SYDNEY NSW 2001
- (56) Prior Art Documents
WO 97/17273
US 5251749
US 4676374
- (57) Claim

1. A compact disk storage box comprising a box having two symmetrical cover shells hinged together, a plurality of compact disk holders received inside said box and adapted for holding individual compact disks, and a plurality of connectors adapted to connect said compact disk holders in series, wherein each of said compact disk holders comprises two pairs of horizontal plug holes bilaterally disposed at two opposite sides, and two pairs of vertical retaining holes respectively disposed in communication with said horizontal plug holes; each of said compact disk holder connectors comprises a first hollow plug plate at one end adapted for fastening to one horizontal plug hole of one of said compact disk holders, a second hollow plug plate at an opposite end adapted for fastening to one horizontal plug hole of one of said compact disk holders, and connecting means connected between said first hollow plug plate and said second hollow plug plate, said first hollow plug plate and said second hollow plug plate having a respective top side and respective hooked retainer strip obliquely raised from the respective top side, said hooked retainer strip

.../2

(11) AU-B-41021/97
(10) 686555

-2-

being forced into engagement with the corresponding vertical retaining hole when the respective hollow plug plate is plugged into one horizontal plug hole of one of said compact disk holders.

AUSTRALIA
PATENTS ACT 1990

PETTY PATENT SPECIFICATION

ORIGINAL

Name and Address
of Applicant: Ting Lih Industrial Co., Ltd.
No. 25, Lane 80, Da Shin Rd.
Tan Tze, Taichung
TAIWAN

Actual Inventor(s): Jiin-Ting Chen

Address for Service: Spruson & Ferguson, Patent Attorneys
Level 33 St Martins Tower, 31 Market Street
Sydney, New South Wales, 2000, Australia

Invention Title: Compact Disk Storage Box

The following statement is a full description of this invention, including the best method of performing it known to me/us:-

COMPACT DISK STORAGE BOX

BACKGROUND AND SUMMARY OF THE INVENTION

The present invention relates to compact disk storage boxes for holding individual compact disks, and more particularly to such a compact disk storage box which comprises a box, a plurality of compact disk holders adapted for holding individual compact disks, and a plurality of connectors adapted to connect compact disk holders in series.

Figures from 5 to 9 show a compact disk storage box according to the prior art. This structure of compact disk storage box comprises a box 4, and a plurality of compact disk holders 5: 5' arranged inside the box 4 and adapted for holding individual compact disks. The box 4 comprised two cover shells 41: 42 hinged together. The cover shells 41: 42 are provided with a respective male connecting element 411 and a respective female connecting element 421. The compact disk holders 5: 5' have male connecting elements 511: 512: 511': 512' and female connecting elements 521: 522: 521': 522'. By connecting respective male connecting elements 511: 512: 511': 512' to respective female connecting elements 521: 522: 521': 522', the compact disk holders 5: 5' are connected in series. When the compact disk holders 5: 5' are connected in series, they are reactively connected between the male connecting elements 411 and female connecting elements 421 of the box 4. Because the male connecting elements 511: 512: 511': 512' and female connecting elements 521: 522: 521': 522' are respectively integral with the compact disk holders 5: 5', the compact disk holders 5: 5' tend to escape from one another when they are folded up and extended out. Further, when two linked compact

disk holders 5: 5' are folded up in one direction, they can be closely attached to each other and arranged in a stack (see Figure 8). However, if two linked compact disk holders 5: 5' are folded up in the reversed direction, the two compact disk holders 5: 5' can not be closely attached to each other due to the constraint of the connecting elements 511: 512: 511': 512': 521: 522: 521': 522'.

The present invention has been accomplished to provide a compact disk storage box which eliminates the aforesaid drawbacks. It is one object of the present invention to provide compact disk holder connectors for a compact disk storage box which can firmly retain compact disk holders together. It is another object of the present invention to provide compact disk holder connectors for a compact disk storage box which permit connected compact disk holders to be folded up in either direction and arranged in a stack. According to the present invention, each compact disk holder has two pairs of horizontal plug holes bilaterally disposed at two opposite sides, and two pairs of vertical retaining holes respectively disposed in communication with the horizontal plug holes; each compact disk holder connector comprises a first hollow plug plate at one end adapted for fastening to one horizontal plug hole of one compact disk holder, a second hollow plug plate at an opposite end adapted for fastening to one horizontal plug hole of one compact disk holder, and a hinge connected between the first hollow plug plate and the second hollow plug plate, the first hollow plug plate and the second hollow plug plate having a respective hooked retainer strip obliquely raised from the top and adapted for engaging into one vertical retaining hole of one compact disk holder.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is an exploded view of a compact disk storage box according to the present invention;

5 Figure 1A shows the relationship between a compact disk holder and a compact disk holder connector according to the present invention;

Figure 2 is a perspective view of the present invention, showing the compact disk holders arranged into two series and connected between the cover shells
10 of the box;

Figure 3 is a sectional view of a part of the present invention, showing a compact disk holder connector connected between two compact disk holders;

15 Figure 4 is a sectional view of the present invention, showing the compact disk holders arranged into stacks inside the box;

Figure 5 is an exploded view of a compact disk storage box according to the prior art;

20 Figure 6 is a perspective view of the compact disk storage box shown in Figure 5;

Figure 7 is a sectional view showing two compact disk holders connected together according to the prior art;

25 Figure 8 is a sectional view showing two linked compact disk holders folded up in one direction according to the prior art;

Figure 9 is a sectional view showing two linked compact disk holders folded up in the reversed direction according to the prior art.

30 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figures 1, 1A and 2, a compact disk storage box in accordance with the present invention is generally comprised of a box 2, a plurality of compact disk holders 1, and a plurality of

compact disk holder connectors 3.

Referring to Figures 1, 1A and 2 again, the compact disk holders 1 are adapted to hold an individual compact disk. Each compact disk holder 1 comprises two pairs of horizontal plug holes 10 bilaterally disposed at two opposite sides thereof, and two pairs of vertical retaining holes 101 respectively disposed in communication with the horizontal plug holes 10. The compact disk holder connectors 3 are adapted to connect the compact disk holder 1 in series. Each compact disk holder connector 3 comprises a first hollow plug plate 31 at one end, a second hollow plug plate 32 at an opposite end, and a hinge 30 connected between the first hollow plug plate 31 and the second hollow plug plate 32. The first hollow plug plate 31 has a hooked retainer strip 311 obliquely raised from its top side. The second hollow plug plate 32 has a hooked retainer strip 321 obliquely raised from its top side. By inserting the first hollow plug plate 31 and second hollow plug plate 32 of one compact disk holder connector 3 into one horizontal plug hole 10 of a first compact disk holder 1 and one horizontal plug hole 10 of a second compact disk holder 1 and then forcing the respective hooked retainer strips 311; 321 into engagement with the corresponding vertical retaining holes 101, two compact disk holders 1 are hinged together. When a plurality of compact disk holders 1 are connected in series by a plurality of compact disk holder connectors 3, the compact disk holders 1 can be folded up and arranged into a stack.

Referring to Figure 3, when the first and second hollow plug plates 31; 32 of the compact disk holder connector 3 are respectively plugged into the corresponding horizontal plug holes 10 of two compact disk holders 1, the hooked retainer strips 311; 321 of

the hollow plug plates 31; 32 are respectively forced into engagement with the corresponding vertical retaining holes 101 of the compact disk holders 1.

Referring to Figure 4, and Figures 1 and 2 again, the box 2 is comprised of a first cover shell 21 and a second cover shell 22 hinged together. The cover shells 21; 22 have respective pairs of hollow plug plates 211; 221 perpendicularly raised from a respective inner vertical wall, and adapted for plugging into the horizontal plug holes 10 of the compact disk holders 1. The hollow plug plates 211; 221 have a respective hooked retainer strip 212; 222 adapted for engaging into the vertical retaining holes 101 of the compact disk holders 1. When a plurality of compact disk holders 1 are connected in series by a plurality of compact disk holder connectors 3, the first and last compact disk holders 1 are respectively fastened to one hollow plug plate 211 of the first cover shell 21 and the corresponding hollow plug plate 221 of the second cover shell 22.

The claim defining the invention are as follows:

1. A compact disk storage box comprising a box having two symmetrical cover shells hinged together, a plurality of compact disk holders received inside said box and adapted for holding individual compact disks, and a plurality of connectors adapted to connect said compact disk holders in series, wherein each of said compact disk holders comprises two pairs of horizontal plug holes bilaterally disposed at two opposite sides, and two pairs of vertical retaining holes respectively disposed in communication with said horizontal plug holes; each of said compact disk holder connectors comprises a first hollow plug plate at one end adapted for fastening to one horizontal plug hole of one of said compact disk holders, a second hollow plug plate at an opposite end adapted for fastening to one horizontal plug hole of one of said compact disk holders, and connecting means connected between said first hollow plug plate and said second hollow plug plate, said first hollow plug plate and said second hollow plug plate having a respective top side and respective hooked retainer strip obliquely raised from the respective top side, said hooked retainer strip being forced into engagement with the corresponding vertical retaining hole when the respective hollow plug plate is plugged into one horizontal plug hole of one of said compact disk holders.

2. The compact disk storage box of claim 1, wherein said connecting means is a hinge.

3. The compact disk storage box of claim 1, wherein each of the two symmetrical cover shells of said box comprises a plurality of hollow plug plates on the inside adapted for plugging into the horizontal plug holes of said compact disk holders, the hollow plug plates of said cover shells having a respective hooked retainer strips adapted for engaging into the vertical retaining holes of said compact disk holders.

Dated 14 October, 1997
Ting Lih Industrial Co., Ltd.

5

Patent Attorneys for the Applicant/Nominated Person
SPRUSON & FERGUSON

2
5
8
4

COMPACT DISK STORAGE BOX

ABSTRACT

A compact disk storage box having a plurality of compact disk holders (1) received on the inside for holding individual compact disks and connected in series by connectors (3), wherein each compact disk holder (1) has two pairs of horizontal plug holes (1) bilaterally disposed at two opposite sides, and two pairs of vertical retaining holes (101) respectively disposed in communication with the horizontal plug holes (10); each compact disk holder connector (3) includes a first hollow plug plate (31) at one end adapted for fastening to one horizontal plug hole of one compact disk holder (1), a second hollow plug plate (32) at an opposite end adapted for fastening to one horizontal plug hole (31) of one compact disk holder (1), and a hing (30) connected between the first hollow plug plate (31) and the second hollow plug plate (32), the first hollow plug plate (31) and the second hollow plug plate (32) having a respective hooked retainer strip (311) obliquely raised from the top and adapted for engaging into one vertical retaining hole of one compact disk holder (1).

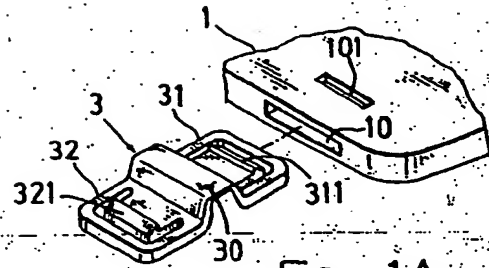


Fig. 1A

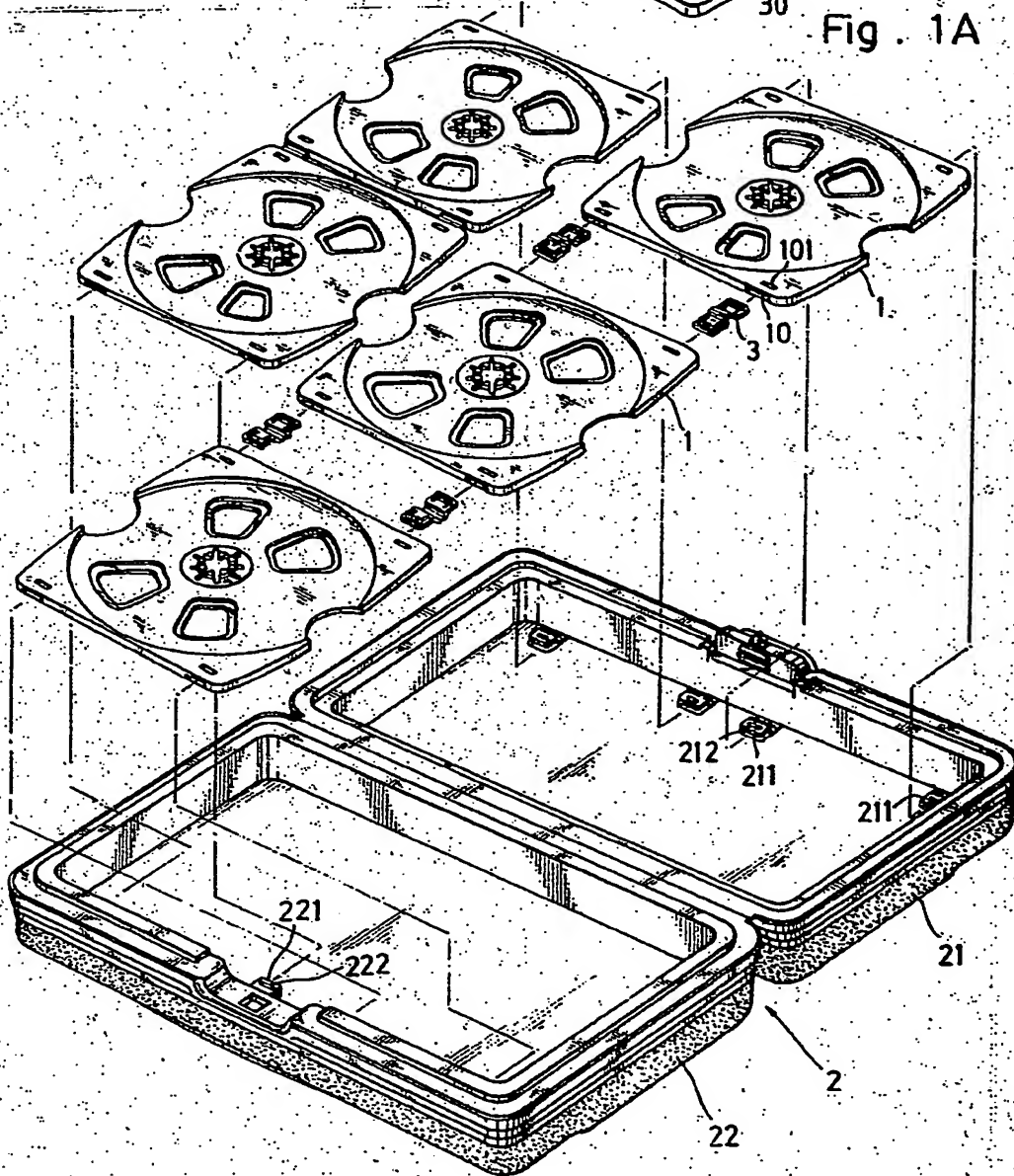


Fig. 1

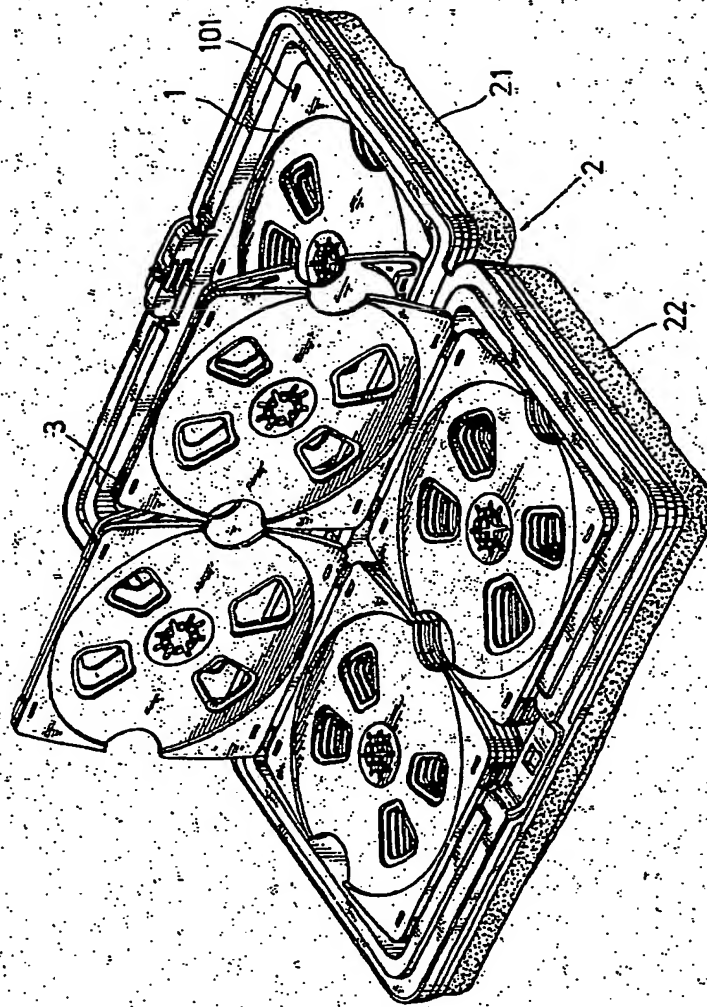


Fig. 2

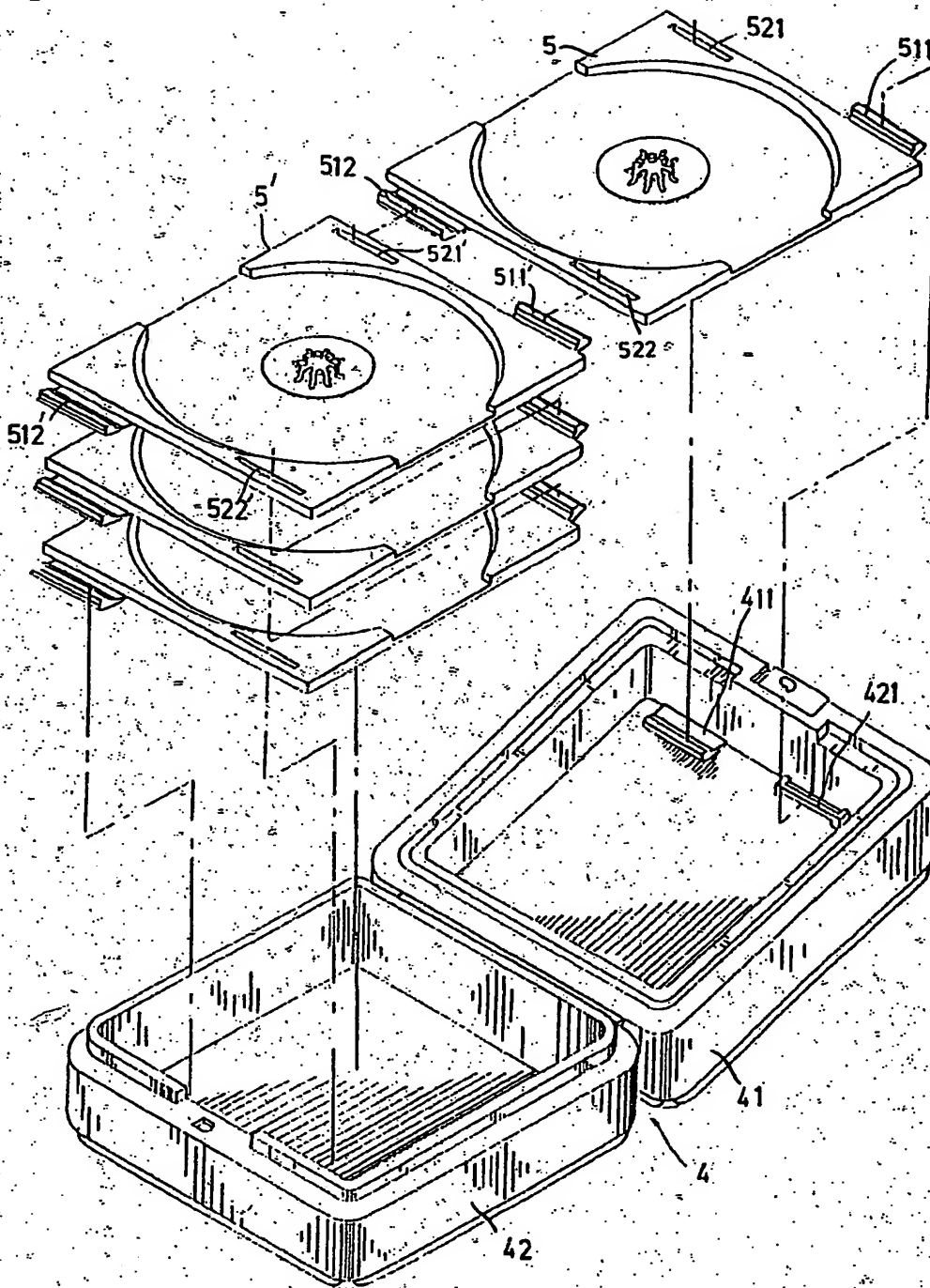


Fig. 5 PRIOR ART

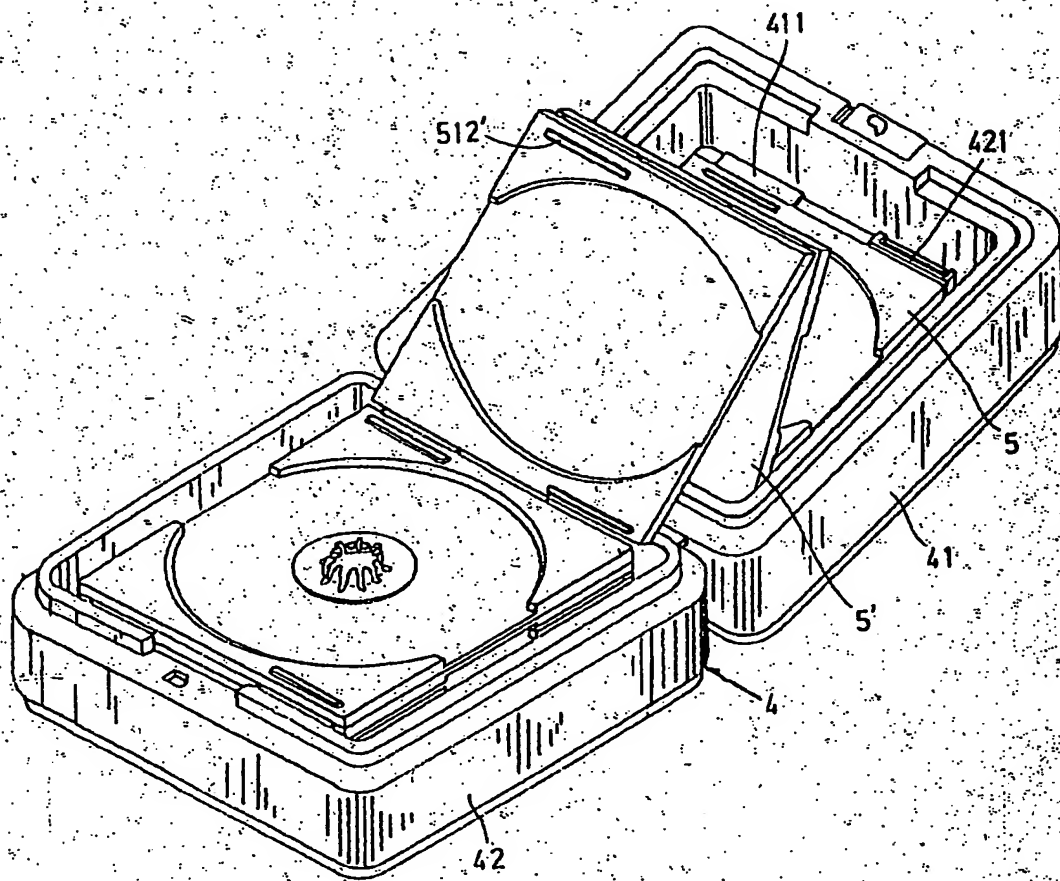


Fig . 6

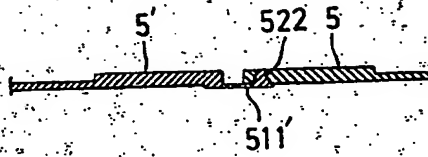


Fig. 7

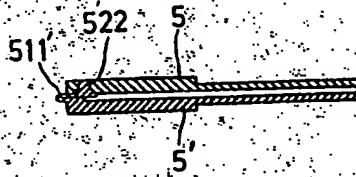


Fig. 8

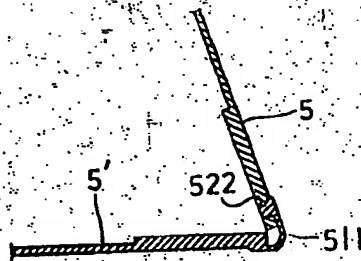


Fig. 9

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.